

### REMARKS

This amendment responds to the Office Action which was mailed on June 4, 2003. In the specification, reference numerals (38 and 39) have been added to the specification where the "breathe-through airflow assembly" and "filter unit" are described in order to conform to the corrected drawings as discussed below. In the claims, Claims 9 and 13-16 have been canceled, while Claim 8 was previously canceled. In light of the amendments and remarks set forth below, it is respectfully submitted that Claims 1-7, 10-12, and 17-20 are in condition for allowance. Applicant requests a favorable reconsideration of this application in light of the remarks set forth below which constitute a full and complete response to the outstanding Office Action.

The drawings were objected to under 37 CFR § 1.83(a) because the drawings must show every feature of the invention specified in the claims. Therefore, the breathe-through airflow assembly and filter unit, which remain as elements of Claims 1 and 17, must be shown. Proposed drawing corrections showing both of these claimed features are enclosed. In addition, the specification has been amended by including reference numerals (38 and 39) where the airflow assembly and filter unit are discussed on page 9. It should also be noted that Claims 9 and 13-16 have been canceled, therefore it is not required that the drawings reflect the elements of those claims. Of course, the drawing corrections showing the breathe-through airflow assembly and filter unit do not comprise new matter since these elements were described and claimed in the application as originally filed. The elements were not included in the drawings due to oversight.

Therefore, it is respectfully submitted that objection to the drawings should now be withdrawn.

Claims 1-4, 7, 9-13, and 17-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ikonen (U.S. Pat. No. 5,758,639) in view of Lane (U.S. Pat. No. 5,555,569). It has been asserted that Ikonen teaches a modular helmet-mask assembly comprising: a face protection shell; a vision port; a flexible nosecup comprising a breathe-through airflow assembly and a filter unit; a flexible face seal; a transparent, impact resistant lens rotatably attached at front part of the helmet; wherein the filter unit comprises a filter element comprising a material capable of filtering chemical vapors and biological aerosols. It has been conceded that Ikonen fails to teach an adjustable head harness, and also fails to teach wherein the face protection assembly is alternately attachable to and detachable from a front part of the helmet. Lane has been relied upon to teach an adjustable head harness.

It is respectfully submitted that Ikonen does not actually teach those claim elements and limitations as recited in the Office Action (and repeated in the foregoing paragraph), and therefore, that Claim 1 and Claim 17 are not taught by the combination of Ikonen and Lane. Moreover, the combination of Ikonen and Lane does not provide any suggestion or motivation for applicant's claimed invention as recited in Claim 1 and Claim 17.

While Ikonen does describe a helmet having an embedded filtration system, it does not describe or teach the integration of a chemical-biological gas mask into a helmet as described and claimed by applicant. Ikonen's device does not in any way provide for chemical and biological protection of the entire eye, face, and respiratory system of the

user. In fact, Ikonen does not describe or teach a face seal at all, nor does it describe a means for overcoming the problems associated with integrating a face seal into a modular helmet assembly. More particularly, Ikonen's device is only designed to provide respiratory protection against air pollutants typically found in road traffic. The purpose of the device is to provide some measure of respiratory protection for motorcyclists or other persons traveling in open unprotected vehicles. As such, Ikonen's device combines a typical motorcycle helmet with a filter unit and a sealing element which *only* protects the mouth and nose of the user. Ikonen's respiratory protection essentially consists of a nosecup having a filter unit therein. However, Ikonen's device provides no gas or vapor protection for the eyes and most of the face of the wearer.

In contrast, applicant's helmet-mask assembly was developed to provide respiratory protection to the wearer against highly toxic chemical gases and virulent biological aerosols. Chemical and biological warfare agents can be fatal to persons exposed only at the eyes and skin, so respiratory protection against inhalation is not enough to protect a person. Therefore, applicant's device was developed to provide protection equivalent to a military gas mask, i.e., full face and eye protection for the wearer, while also integrating the full face mask with a high performance aircrew helmet. Applicant's invention provides a modular integration of a military level of protection chemical/biological mask with the aircrew helmet, thereby eliminating the discomfort and loss of protection associated with using a separate mask and helmet that are designed to utilize the same space around the wearer's head. While many helmets provide crash and ballistics protection, applicant is unaware of any that provide internal chemical and

biological warfare agent protection without the use of some external means of forced blown filtered air.

With respect to the elements and limitations of the claims, Claim 1 and Claim 17 both include a separate "face protection assembly" which is attachable and detachable to the front part of the helmet. Ikonen does not teach or suggest a detachable face protection assembly. More importantly, this "face protection assembly" essentially comprises a face protection shell having a chemical-biological mask therein, and includes a "flexible face seal, disposed on an inner surface of the face protection shell around the nosecup assembly and the vision port, which face seal is capable of engaging the face of a user". As depicted in Figure 4 and described in the specification on page 9, lines 19-26, the face seal surrounds and protects the entire face of the user, including the eyes. If applicant's device merely protected the nose and mouth of the user, it would be useless in a toxic chemical or biological aerosol environment.

It is also important to note that applicant's invention, as recited in Claims 1 and 17, is a two-piece assembly comprising a "helmet" and a "face-protection assembly." This two-piece assembly is essential for securing an adequate face seal for the gas mask protecting the wearer from biological and chemical agents, while at the same time permitting the protective helmet to be worn comfortably and effectively. Ikonen's device does not teach or even address the issue of making an adequate face seal for a gas mask while integrating the face seal into a modular helmet assembly.

Lane was relied on to teach a common head harness for adjusting fit. It is conceded that Lane teaches a common head harness, but this feature is not relied on for patentability by applicant. More importantly, the mask and filter system described in

Lane are not integrated into the helmet, i.e., the helmet and mask remain two independent components, which are merely connected by a common head harness. In addition, Lane teaches an external filtration system for providing filtered air. In contrast, applicant's invention includes an internal head harness which allows the seal of the helmet system to "float" in a fashion so that the seal will not be affected after the face-protection assembly is engaged on the helmet and the helmet is stabilized. It should be clear that Lane does not teach or suggest the modular helmet-mask assembly having an integrated gas mask filtration and face seal for the wearer, as recited in Claims 1 and 17, and can not be combined with Ikonen to do so.

It is respectfully submitted that since the elements of Claims 1 and 17 are not taught by the combined teachings of Ikonen and Lane, nor is any motivation provided for the claimed elements of applicant's invention. Claims 1 and 17 should be considered patentable and in condition for allowance. Moreover, since Claims 2-7 and 10-12 are directly or indirectly dependent from Claim 1 and are further limiting thereto, and since Claims 18-20 are directly dependent from Claim 17 are further limiting thereto, Claims 2-7, 10-12, and 18-20 are also patentable and in condition for allowance.

In summary, Claims 1-7, 10-12, and 17-20 remain in the case and based on the foregoing amendments and arguments should not be considered obvious over the prior art cited. Accordingly, it is respectfully submitted that these claims are patentable and in condition for allowance. Early reconsideration and withdrawal of the rejections is earnestly solicited, as is allowance of the claimed subject matter.

Respectfully submitted,

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DATE

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